

MAYOR & COUNCIL AGENDA COVER SHEET

MEETING DATE:

September 18, 2006

CALL TO PODIUM:

Erica Shingara, Environmental Services Director

RESPONSIBLE STAFF:

Erica Shingara, Environmental Services Director
Eli Golfer, Environmental Specialist

AGENDA ITEM:

(please check one)

	Presentation
	Proclamation/Certificate
	Appointment
	Public Hearing
	Historic District
	Consent Item
	Ordinance
X	Resolution
	Policy Discussion
	Work Session Discussion Item
	Other:

PUBLIC HEARING HISTORY:

(Please complete this section if agenda item is a public hearing)

Introduced	
Advertised	
Hearing Date	
Record Held Open	
Policy Discussion	

TITLE:

Resolution of the Mayor and City Council Authorizing the Mayor to Sign the U.S. Mayors Climate Protection Agreement as Amended at the 73rd Annual U.S. Conference of Mayors Meeting

SUPPORTING BACKGROUND:

The Maryland Chapter of the Sierra Club and several City residents have requested that Gaithersburg join the *Cool Cities Campaign (CCC)* by signing the *U.S. Mayors Climate Protection Agreement (MCPA)*. Essentially, the MCPA is the pledge of participating cities to *strive* to meet or exceed the Kyoto Protocol commitment of reducing global warming pollution in their cities by 7 percent below 1990 levels by 2012 through the implementation of twelve strategies. Such strategies include, but are not limited to, inventorying greenhouse gas emissions, reducing sprawl and vehicle miles travels, promoting clean alternative energy, increasing energy efficiency, green building, green municipal fleets, maintaining healthy urban forests, and education.

As indicated in the attached memorandum dated August 25 2006, the Environmental Affairs Committee reviewed the MCPA and recommends that the City participate in this program. During the September 5, 2006 Mayor and Council meeting, the Mayor and City Council asked the City Manager to prepare a resolution and place it on the agenda for action during the September 18, 2006 meeting.

Staff will provide a brief presentation on the CCC and MCPA and discuss emission reduction strategies.

Attachments:

Resolution

Exhibit A: Memorandum from the City Manager to the Mayor and City Council, August 30, 2006.

Exhibit B: Memorandum from the Environmental Services Director to the City Manager, August 25, 2006

DESIRED OUTCOME:

Vote on Resolution.

RESOLUTION NO. _____

RESOLUTION OF THE MAYOR AND CITY COUNCIL AUTHORIZING THE MAYOR
TO SIGN THE U.S. MAYORS CLIMATE PROTECTION AGREEMENT AS AMENDED
AT THE 73RD ANNUAL U.S. CONFERENCE OF MAYORS MEETING

WHEREAS, the *Cool Cities Campaign* encourages local leaders throughout the country to move forward with the *U.S. Mayors Climate Protection Agreement* and other innovative solutions to reduce heat-trapping global warming pollution; and

WHEREAS, the U.S. Conference of Mayors has previously adopted strong policy resolutions calling for cities, communities and the federal government to take actions to reduce global warming pollution; and

WHEREAS, the Inter-Governmental Panel on Climate Change (IPCC), the international community's most respected assemblage of scientists, has found that climate disruption is a reality and that human activities are largely responsible for increasing concentrations of global warming pollution; and

WHEREAS, on February 16, 2005, the Kyoto Protocol, an international agreement to address climate disruption, went into effect in the 141 countries that have ratified it to date; 38 of those countries are now legally required to reduce greenhouse gas emission on average 5.2 percent below 1990 levels by 2012; the emission reduction target for the U.S. would have been 7 percent below 1990 levels by 2012; and

WHEREAS, state and local governments throughout the nation, both large and small, are voluntarily conducting emissions inventories and striving to reduce global warming pollutants through programs that provide economic and quality of life benefits such as reduced energy bills, green space preservation, air quality improvements, reduced traffic congestion, improved transportation choices, and economic development and job creation through energy conservation and new energy technologies; and

WHEREAS, the Environmental Affairs Committee has recommended that the City of Gaithersburg sign the U.S. Mayors Climate Protection Agreement, as a first step, and that the City initiate cost-effective local strategies that save energy and taxpayer dollars, improve public health, and reduce emissions; and

WHEREAS, the Mayor and City Council is committed to the long-range goal of reducing greenhouse gas emissions and, with respect to City operations, will incorporate this goal into the City's Strategic Directions for planning, implementation, and monitoring:

NOW, THEREFORE, BE IT RESOLVED, that the Mayor and City Council of Gaithersburg authorizes the Mayor to sign the U.S. Mayors Climate Protection Agreement as amended by the 73rd annual U.S. Conference of Mayors meeting and pledges to join with jurisdictions from all over the world to strive to meet or exceed Kyoto Protocol targets for reducing global warming, as well as participate in other associated programs to implement this agreement.

ADOPTED by the Mayor and City Council this 18th day of September, 2006.

SIDNEY A. KATZ, MAYOR and
President of the Council

THIS IS TO CERTIFY that the foregoing
Resolution was adopted by the City Council
in public meeting assembled on the 18th day
of September, 2006.

David B. Humpton, City Manager

MEMORANDUM TO: Mayor and City Council

FROM: David B. Humpton, City Manager *DBH*

DATE: August 30, 2006

SUBJECT: U.S. Mayors Climate Protection Agreement

The Maryland Chapter of the Sierra Club and several City residents have asked that the City join the *Cool Cities Campaign* by signing the *U.S. Mayors Climate Protection Agreement (MCPA)*. Essentially, the MCPA seeks to reduce global warming pollution by implementing policies and programs to reduce greenhouse emissions.

As indicated in the attached memorandum from Environmental Affairs Director Shingara, the Environmental Affairs Committee has recommended that the City participate in this program.

As you know, the City has significantly enhanced our environmental programs over the last several years, and I believe that it is in the City's interest to participate in the *Cool Cities Campaign*.

I will be seeking guidance from the Mayor and City Council during the September 5, 2006 Mayor and City Council meeting with the goal of having a resolution authorizing the Mayor to sign the MCPA on the agenda for consideration during the September 18, 2006 Mayor and City Council meeting.

If you have any questions, or wish to discuss this matter please let me know.

dbh/sp
Attachments

MEMORANDUM TO: David Humpton, City Manager

FROM: Erica Shingara, Environmental Services Director *ES*
 Eli Golfer, Environmental Specialist *EG*

DATE: August 25, 2006

SUBJECT: U.S. Mayors Climate Protection Agreement

Gaithersburg has been approached by the Maryland Chapter of the Sierra Club and several citizens to join the *Cool Cities Campaign* (CCC) by signing the *U.S. Mayor's Climate Protection Agreement* (MCPA).¹ Through participation in both of these programs, state and local governments throughout the U.S. are taking action to reduce global warming pollution by implementing policies and programs to achieve the greenhouse gas reduction goals of the Kyoto Protocol.² Global warming refers to the observed increase in global temperatures resulting from the accumulation of greenhouse gases (GHGs), such as carbon dioxide, methane, and the family of fluorocarbons. These gases trap the sun's heat as it is radiated from the earth, and prevent it from escaping back into space. Rising global temperatures are expected to change climate, rainfall patterns, and sea level which may present a wide range of impacts on ecological systems, agriculture and food production, human health, and economic activities.

Overview of the Cool Cities Campaign

The *Cool Cities Campaign* is a grassroots movement encouraging local leaders throughout the country to move forward with the MCPA and other innovative solutions to reduce heat-trapping global warming pollution. There are four steps to becoming a "cool city":

- Step 1: Take the "Cool Cities" Pledge by signing the U.S. Mayors Climate Protection Agreement.** This agreement sets the goal of reducing citywide global warming pollution to 7 percent below 1990 levels by 2012 and identifies twelve strategies to achieve this goal (as outlined in Exhibit 1).
- Step 2: Conduct an inventory of the city's current global warming emissions.** This information will identify the City's major GHG sources and will provide a baseline to judge the City's progress towards its goal.
- Step 3: Develop a solutions plan to reduce City emissions while lowering energy costs.** The MCPA identifies twelve important strategies to incorporate into this plan. Three of the important strategies stressed by the Cool Cities Campaign include:
 - greening the City's vehicle fleet with hybrid and other cleaner automobiles;
 - modernizing city buildings with money-saving energy-efficiency technology; and
 - investing in clean and safe renewable energy.
- Step 4: Implement plan and monitor progress.**

¹ Copies of the CCC, MCPA, and correspondence are attached in Exhibits 2 through 7.

² The Kyoto Protocol is an annex to the United Nations Framework Convention on Climate Change (FCCC), establishing legally binding commitments by industrialized countries to reduce their *collective* emissions of anthropogenic (human-caused) GHGs by 5.2 percent compared to 1990 emissions levels. As of July 2006, a total of 164 countries have ratified the Kyoto Protocol, which entered into force on February 16, 2005. Although the United States is a party to the FCCC, and was the original proponent of the protocol's emissions reduction credit trading system, the United States has, to date, withheld ratification. The Kyoto Protocol emissions reduction target for the U.S. would have been 7 percent below 1990 levels by 2012.

Overview of the MCPA

The MCPA is an initiative spearheaded by Seattle Mayor Gregory Nickels that was unanimously endorsed by the U.S. Conference of Mayors in June of 2005 to encourage state and local governments to take actions to reduce greenhouse gases. As of August 16, 2006, 284 mayors representing over 48.8 million Americans have signed the MCPA. Under this agreement, participating governments pledge to take three actions:

1. Strive to meet or exceed the Kyoto GHG emissions reductions targets for the United States in their own operations and communities; and
2. Urge state and federal governments to enact policies and programs to meet or beat the Kyoto Protocol GHG reduction targets for the United States; and
3. Urge the U.S. Congress to pass bipartisan GHG reduction legislation that include clear timetables and emissions limits and a flexible, market-based national emission reduction trading system.

A central focus of the MCPA is the pledge of participating cities to *strive* to meet or exceed the Kyoto Protocol commitment of reducing global warming pollution in their cities to 7 percent below 1990 levels by 2012 through the implementation of twelve strategies. These strategies, specifically outlined in Exhibit 1, include increasing energy efficiency, reducing vehicle miles traveled, maintaining healthy urban forests, reducing sprawl, and promoting clean renewable energy.

Environmental Affairs Committee Recommendations

The Environmental Affairs Committee reviewed the *Cool Cities Campaign*, evaluated the twelve strategies identified in the MCPA, and discussed potential action items and their associated costs to satisfy these goals (as outlined in Exhibit 1). Overall, the Committee was of the opinion that many of Gaithersburg's existing environmental policies and programs currently support the MCPA. They include green building, mixed-use land development policies, and urban landscape and forestry programs. Therefore, the continuation of these existing policies and programs will likely contribute significantly to achieving the seven percent reduction without the need for additional resources. Action items that would require additional funding and staff resources include conducting an emissions inventory, pursuing alternative energy, greening the City's vehicle fleet, and implementing energy efficiency improvements. The Committee, however, advised that there are many cost effective mechanisms for achieving these MCPA commitments.

Currently in this region, only Annapolis, Chevy Chase, Baltimore, Alexandria, and Washington DC have signed the MCPA agreement. Therefore, the Committee also found this to be an important opportunity for Gaithersburg to become a leader and encourage the broader community to effect change, reduce reliance on fossil fuels, save energy, and reduce emissions to improve our environment and quality of life. Furthermore, the Committee advised that the consequences of inaction by the City will be detrimental. The City should expect that regulatory requirements to address global warming will be mandated in the future, and it will cost the City more to play "catch up" due to the lack of early action. Therefore, the Committee believes it is important for the City to begin taking action now to inventory GHGs, to measure its efforts to reduce emissions, and to work with other participating jurisdictions on national efforts to mitigate the impacts and costs of global warming pollution.

For these reasons, the Environmental Affairs Committee strongly recommends that the City of Gaithersburg sign the *U.S. Mayor's Climate Protection Agreement* (MCPA), as a first step, and that the City initiate cost-effective local strategies that save energy and taxpayer dollars, improve public health, and reduce emissions. The Committee has identified, as a preliminary step, some initiatives to accomplish these goals in the attached table (Exhibit 1). The Committee also recommends that each City department

review the MCPA agreement and suggested action items, and consult with other participating jurisdictions, in order to determine appropriate initiatives. This would enable the involvement of all of the City's departments and facilities. These measures can then be incorporated into the City's Strategic Directions for planning, implementation, and monitoring.

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Attachments (7)

- Exhibit 1: Table Summarizing MCPA Strategies, Potential Action Items, and Costs
- Exhibit 2: U.S. Mayors Climate Protection Agreement (MCPA)
- Exhibit 3: Cool Cities Campaign (CCC)
- Exhibit 4: Letter from Betsy Johnson, Chair of Maryland Chapter of the Sierra Club, to Mayor Sidney Katz, May 6, 2006
- Exhibit 5: Email from Karen Rainbolt, 934 Pointer Ridge Drive, to Mayor Sidney Katz, March 30, 2006
- Exhibit 6: Email from Betsy Johnson, Chair of Maryland Chapter of the Sierra Club, to Mayor Sidney Katz, March 14, 2006
- Exhibit 7: Email from Shawn Humphrey, 335 West Side Drive, to Mayor Sidney Katz, May 25, 2005

cc: Environmental Affairs Committee

**Exhibit 1: U.S. Mayor's Climate Protection Agreement
Summary of Strategies, Potential Action Items, and Costs**

U.S. Mayor's Climate Protection Agreement Strategies	Potential Action Items	Potential Costs	Committee Comments
1. Inventory global warming emissions in City operations and in the community, set reduction targets and create an action plan.	<ul style="list-style-type: none"> - Conduct emissions inventory (i.e., from buildings, facilities, and fleet vehicles, street lights, waste generation, residential, transportation) and reduction action plan. 	<p>There are a range of costs associated with an emission inventory:</p> <ul style="list-style-type: none"> - Inhouse assessment: <ol style="list-style-type: none"> 1. Torrie-Smith Emissions Inventory Software, \$1,000 to be used by Gaithersburg staff. 2. ICLEI provide software tailored to local governments. To utilize the software, the City must become a member which involves annual dues of \$1,200 and an adopted ICLEI program resolution (similar to the US MCPA). 3. EPA and other organizations provide free emissions estimation software. - Consulting resources: Client Mitigation Services developed inventory for the City of Aspen for \$25,000. 	<ul style="list-style-type: none"> - Initial efforts should focus on a low-cost model for estimating emissions and reduction benefits from programs the City has already put in place. This will allow the City to focus more resources on implementing programs. - Compare current rates to 1990 data, quantify reductions already achieved, and make reductions from there. - There is substantial low or no cost technical assistance available.
2. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact walkable urban communities.	<ul style="list-style-type: none"> - Currently incorporated into existing land use and zoning policies. 	<ul style="list-style-type: none"> - Not applicable. 	<ul style="list-style-type: none"> - How have land use policies changed since 1990 and what emissions reductions can be attributed to policies put in place since 1990? - How has population growth affected emissions in Gaithersburg (gross and net)?

U.S. Mayor's Climate Protection Agreement Strategies	Potential Action Items	Potential Costs	Committee Comments
3. Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car pooling and public transit.	- Expand bike and pedestrian networks.	- Costs associated with right-of-way, design, construction, maintenance of bike and pedestrian networks.	<ul style="list-style-type: none">- How do you measure emissions reductions for alternative transportation modes and expanded bike and pedestrian networks?- Employee incentive programs involve minor costs.- The City can advocate for State funding and encourage reductions by City employees and local businesses in vehicle miles traveled (VMT).- City can credit emissions reductions from programs implemented since 1990.
	- Increase County and State funding for public transportation in Gaithersburg.	- Not determined.	
	- Provide incentives to City employees who carpool, bike, walk, or take public transportation to work. Offer telecommuting options.	<ul style="list-style-type: none">- Montgomery County's Fare Share program allows employers to pay up to \$32.50 per month for each employee who commutes by transit. Montgomery County matches that amount up to \$32.50 per month. Tax credits and deductions are also associated with the program.	
	- Encourage local businesses to offer their own alternative transportation employee programs (bike racks, showers, carpools, etc.) Offer telecommuting options.		
4. Increase the use of clean, alternative energy by, for example, investing in "green tags," advocating for the development of renewable energy resources, and supporting the use of waste to energy technologies.	<ul style="list-style-type: none">- The City currently participates in the Montgomery County Electricity Purchasing Partnership which acquires five percent of its electricity from clean, renewable wind energy.- As part of the LEED requirements, the Youth Center at Robertson Park has a special clean energy contract that purchases 51% of the building's electricity from wind power.	<ul style="list-style-type: none">- Small cost increase for purchasing wind power vs. conventional power.- Other alternative energy options in Maryland may be limited.	<ul style="list-style-type: none">- City should encourage developers to use geothermal and alternative energy sources for future developments.- The City should educate the public and HOAs through alternative energy workshops and discussion panels.- City can coordinate efforts with other jurisdictions and Montgomery County to negotiate increased percentages of wind energy, and promote state policies that encourage new clean energy generation.
	<ul style="list-style-type: none">- Use geothermal technology for future and existing city facilities.	<ul style="list-style-type: none">- Increased capital cost of geothermal unit for Youth Center; City to analyze payback.	

U.S. Mayor's Climate Protection Agreement Strategies	Potential Action Items	Potential Costs	Committee Comments
5. Make energy efficiency a priority through building code improvements, retrofitting city facilities with energy efficient lighting and urging employees to conserve energy and save money.	- Design, construction, and retrofits of City facilities utilize energy efficient and cost effective heating, cooling, lighting, and hot water technologies.	- Costs of energy efficient technologies vary. - Cost of staff resources to implement retrofits.	- Need to monitor current energy use per facility to establish baseline. Can roughly estimate square footage based emissions reductions for retrofits (EPA has tools to estimate). City can credit accomplishments.
	- Employee energy conservation program.	- Cost of staff resources to monitor current uses and develop reduction strategies.	
6. Purchase only ENERGY STAR equipment and appliances for City use.	- Develop a policy requiring all new City computers and equipment and appliances to be ENERGY STAR qualified.	- Minimal cost differential between Energy Star and conventional equipment. . - Potential annual energy savings for office equipment.	- Great energy savings and emissions reductions credits for low-cost solutions.
7. Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or a similar system.	- Future City projects should incorporate LEED sustainability requirements.	- Additional capital costs associated with LEED certification. Need to determine payback on a case-by-case basis.	- The City should conduct a cost analysis of the Youth Center at Robertson Park to determine the return on investment for LEED components and advocate benefits. - "Green" projects have greater benefit with rising energy prices.
	- The City currently provides incentives to promote LEED in private commercial development.	- Reduced revenue from building permits due to refunds for attaining LEED certification.	- Track program and building performance.
	- City staff are developing draft green residential standards to minimize energy and utility costs, promote health and comfort, and reduce impacts on the environment.	- Minimal costs to the City; program anticipated to be incorporated into existing residential code and inspection program. - Slight upfront costs to developer/homeowner that may be	- Publicize federal and state incentives for homeowners and contractors - Encourage HOAs to facilitate retrofits to existing systems.

**Exhibit 1: U.S. Mayor's Climate Protection Agreement
Summary of Strategies, Potential Action Items, and Costs**

U.S. Mayor's Climate Protection Agreement Strategies	Potential Action Items	Potential Costs	Committee Comments
1. Inventory global warming emissions in City operations and in the community, set reduction targets and create an action plan.	<ul style="list-style-type: none"> - Conduct emissions inventory (i.e., from buildings, facilities, and fleet vehicles, street lights, waste generation, residential, transportation) and reduction action plan. 	<p>There are a range of costs associated with an emission inventory:</p> <ul style="list-style-type: none"> - Inhouse assessment: <ol style="list-style-type: none"> 1. Torrie-Smith Emissions Inventory Software, \$1,000 to be used by Gaithersburg staff. 2. ICLEI provide software tailored to local governments. To utilize the software, the City must become a member which involves annual dues of \$1,200 and an adopted ICLEI program resolution (similar to the US MCPA). 3. EPA and other organizations provide free emissions estimation software. - Consulting resources: Client Mitigation Services developed inventory for the City of Aspen for \$25,000. 	<ul style="list-style-type: none"> - Initial efforts should focus on a low-cost model for estimating emissions and reduction benefits from programs the City has already put in place. This will allow the City to focus more resources on implementing programs. - Compare current rates to 1990 data, quantify reductions already achieved, and make reductions from there. - There is substantial low or no cost technical assistance available.
2. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact walkable urban communities.	<ul style="list-style-type: none"> - Currently incorporated into existing land use and zoning policies. 	<ul style="list-style-type: none"> - Not applicable. 	<ul style="list-style-type: none"> - How have land use policies changed since 1990 and what emissions reductions can be attributed to policies put in place since 1990? - How has population growth affected emissions in Gaithersburg (gross and net)?

U.S. Mayor's Climate Protection Agreement Strategies	Potential Action Items	Potential Costs	Committee Comments
		offset by federal and state incentives. The payback will be greater with rising energy prices.	
8. Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to bio-diesel.	- The City is retrofitting a diesel gas pump to use B20 (Biodiesel) at DPW. B20 lowers carbon monoxide (CO) emissions by 9 percent, particulate matter emissions by 8 percent and sulfate emissions by 20 percent.	- Minimal costs for retrofitting storage tanks and pumps. Vehicles do not need to be retrofitted.	- The City should research and evaluate other alternative fuel fleet options. - Cost savings from reduced consumption can mitigate implementation costs.
	- Conduct a fleet emissions inventory.	- Costs included in overall emissions inventory (action item #1).	
	- Create an anti-idling policy for city vehicles.	- Minimal cost.	
9. Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production.	- Not applicable. WSSC operates water and wastewater systems.	- Not applicable.	-
10. Increase recycling rates in City operations and in the community.	- Recently adopted mandatory multifamily and commercial recycling program.	- Montgomery County administers and enforces program, no additional cost to the City.	- Calculate emissions reduction credits from participation.
	- Increase recycling rates in municipal operations and at City facilities and functions.	- Cost for additional bins and collection.	-
	- Continue to update and improve residential recycling program.	- Cost of education materials and bins.	-

U.S. Mayor's Climate Protection Agreement Strategies	Potential Action Items	Potential Costs	Committee Comments
11. Maintain healthy urban forests; promote tree planting to increase shading and to absorb CO2.	<ul style="list-style-type: none"> - Continue to implement and Forest Conservation requirements and urban forestry program. 	<ul style="list-style-type: none"> - Costs currently incorporated into City's existing Landscape and Forestry and Environmental Affairs budgets. 	<ul style="list-style-type: none"> -
12. Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.	<ul style="list-style-type: none"> - Continue to promote environmental education through Old Towne Day; Green Week; Going Green at Home program; school and youth programs; cable TV, website, brochures, and publications. 	<ul style="list-style-type: none"> - Costs currently incorporated into existing operations and maintenance budgets. 	<ul style="list-style-type: none"> - Incorporate climate change reduction strategies into existing education and outreach programs. - Get community involved via EPA individual calculator and outreach about easily implemented individual actions, and measure emissions reductions that result. - Encourage HOAs to facilitate conversions to solar/geothermal.

U.S. Mayor's Climate Protection Agreement Strategies	Potential Action Items	Potential Costs	Committee Comments
		offset by federal and state incentives. The payback will be greater with rising energy prices.	
8. Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to bio-diesel.	- The City is retrofitting a diesel gas pump to use B20 (Biodiesel) at DPW. B20 lowers carbon monoxide (CO) emissions by 9 percent, particulate matter emissions by 8 percent and sulfate emissions by 20 percent.	- Minimal costs for retrofitting storage tanks and pumps. Vehicles do not need to be retrofitted.	- The City should research and evaluate other alternative fuel fleet options. - Cost savings from reduced consumption can mitigate implementation costs.
	- Conduct a fleet emissions inventory.	- Costs included in overall emissions inventory (action item #1).	
	- Create an anti-idling policy for city vehicles.	- Minimal cost.	
9. Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production.	- Not applicable. WSSC operates water and wastewater systems.	- Not applicable.	-
10. Increase recycling rates in City operations and in the community.	- Recently adopted mandatory multifamily and commercial recycling program.	- Montgomery County administers and enforces program, no additional cost to the City.	- Calculate emissions reduction credits from participation.
	- Increase recycling rates in municipal operations and at City facilities and functions.	- Cost for additional bins and collection.	-
	- Continue to update and improve residential recycling program.	- Cost of education materials and bins.	-

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12. Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.	<ul style="list-style-type: none"> - Continue to promote environmental education through Old Towne Day; Green Week; Going Green at Home program; school and youth programs; cable TV, website, brochures, and publications. 	<ul style="list-style-type: none"> - Costs currently incorporated into existing operations and maintenance budgets. 	<ul style="list-style-type: none"> - Incorporate climate change reduction strategies into existing education and outreach programs. - Get community involved via EPA individual calculator and outreach about easily implemented individual actions, and measure emissions reductions that result. - Encourage HOAs to facilitate conversions to solar/geothermal.

ENDORISING THE U.S. MAYORS CLIMATE PROTECTION AGREEMENT

WHEREAS, the U.S. Conference of Mayors has previously adopted strong policy resolutions calling for cities, communities and the federal government to take actions to reduce global warming pollution; and

WHEREAS, the Inter-Governmental Panel on Climate Change (IPCC), the international community's most respected assemblage of scientists, has found that climate disruption is a reality and that human activities are largely responsible for increasing concentrations of global warming pollution; and

WHEREAS, recent, well-documented impacts of climate disruption include average global sea level increases of four to eight inches during the 20th century; a 40 percent decline in Arctic sea-ice thickness; and nine of the ten hottest years on record occurring in the past decade; and

WHEREAS, climate disruption of the magnitude now predicted by the scientific community will cause extremely costly disruption of human and natural systems throughout the world including: increased risk of floods or droughts; sea-level rises that interact with coastal storms to erode beaches, inundate land, and damage structures; more frequent and extreme heat waves; more frequent and greater concentrations of smog; and

WHEREAS, on February 16, 2005, the Kyoto Protocol, an international agreement to address climate disruption, went into effect in the 141 countries that have ratified it to date; 38 of those countries are now legally required to reduce greenhouse gas emissions on average 5.2 percent below 1990 levels by 2012; and

WHEREAS, the United States of America, with less than five percent of the world's population, is responsible for producing approximately 25 percent of the world's global warming pollutants; and

WHEREAS, the Kyoto Protocol emissions reduction target for the U.S. would have been 7 percent below 1990 levels by 2012; and

WHEREAS, many leading US companies that have adopted greenhouse gas reduction programs to demonstrate corporate social responsibility have also publicly expressed preference for the US to adopt precise and mandatory emissions targets and timetables as a means by which to remain competitive in the international marketplace, to mitigate financial risk and to promote sound investment decisions; and

WHEREAS, state and local governments throughout the United States are adopting emission reduction targets and programs and that this leadership is bipartisan, coming from Republican and Democratic governors and mayors alike; and

WHEREAS, many cities throughout the nation, both large and small, are reducing global warming pollutants through programs that provide economic and quality of life benefits such as reduced energy bills, green space preservation, air quality improvements, reduced traffic congestion, improved transportation choices, and economic development and job creation through energy conservation and new energy technologies; and

WHEREAS, mayors from around the nation have signed the U.S. Mayors Climate Protection Agreement which, as amended at the 73rd Annual U.S. Conference of Mayors meeting, reads:

The U.S. Mayors Climate Protection Agreement

- A. We urge the federal government and state governments to enact policies and programs to meet or beat the target of reducing global warming pollution levels to 7 percent below 1990 levels by 2012, including efforts to: reduce the United States' dependence on fossil fuels and accelerate the development of clean, economical energy resources and fuel-efficient technologies such as conservation, methane recovery for energy generation, waste to energy, wind and solar energy, fuel cells, efficient motor vehicles, and biofuels;
- B. We urge the U.S. Congress to pass bipartisan greenhouse gas reduction legislation that includes 1) clear timetables and emissions limits and 2) a

- flexible, market-based system of tradable allowances among emitting industries; and
- C. We will strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution by taking actions in our own operations and communities such as:
1. Inventory global warming emissions in City operations and in the community, set reduction targets and create an action plan.
 2. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities;
 3. Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car pooling and public transit;
 4. Increase the use of clean, alternative energy by, for example, investing in "green tags", advocating for the development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology;
 5. Make energy efficiency a priority through building code improvements, retrofitting city facilities with energy efficient lighting and urging employees to conserve energy and save money;
 6. Purchase only Energy Star equipment and appliances for City use;
 7. Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or a similar system;
 8. Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to bio-diesel;
 9. Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production;
 10. Increase recycling rates in City operations and in the community;
 11. Maintain healthy urban forests; promote tree planting to increase shading and to absorb CO₂; and

12. Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.

NOW, THEREFORE, BE IT RESOLVED that The U.S. Conference of Mayors endorses the U.S. Mayors Climate Protection Agreement as amended by the 73rd annual U.S. Conference of Mayors meeting and urges mayors from around the nation to join this effort.

BE IT FURTHER RESOLVED, The U.S. Conference of Mayors will work in conjunction with ICLEI Local Governments for Sustainability and other appropriate organizations to track progress and implementation of the U.S. Mayors Climate Protection Agreement as amended by the 73rd annual U.S. Conference of Mayors meeting.

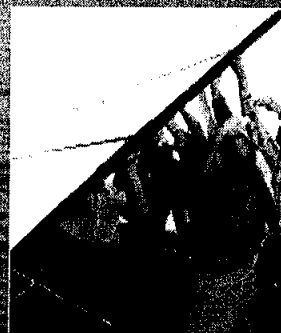
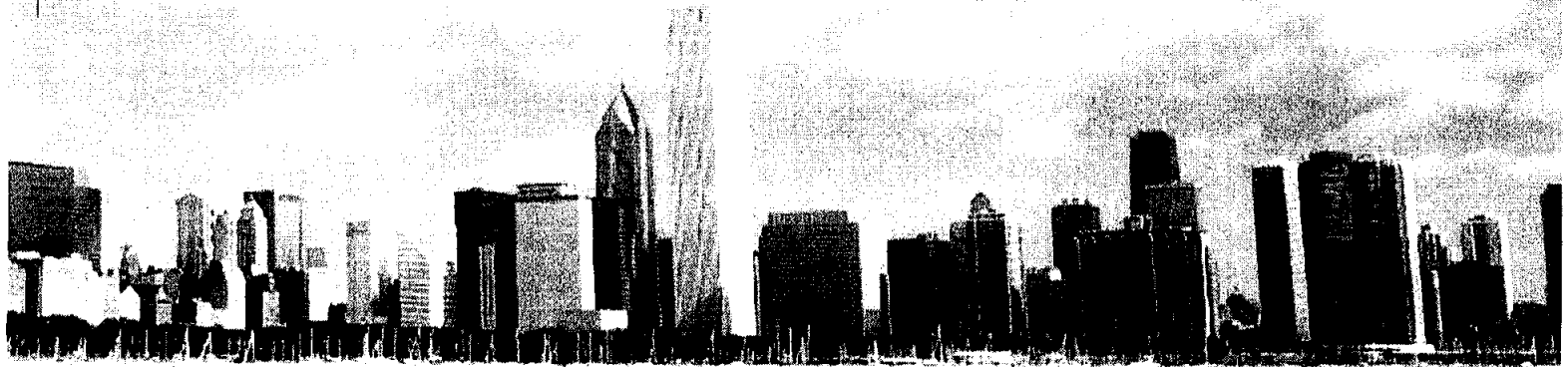
For more information: <http://www.coolcities.us/files/coolcitiesguide.pdf>



Explore, enjoy and protect the planet

Cool CITIES

Solving Global Warming One City at a Time



Sierra Club's Guide to Local Global Warming Solutions

Cool Cities

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Four Steps to Become a Cool City	4
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Acknowledgements

Written by Glen Brand and Brendan Bell, Sierra Club's Global Warming and Energy Program

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COVER PAGE PHOTOS:

1. Skyline of Chicago, one of the more than 200 cities that have pledged to reduce local heat-trapping pollution. PHOTO BY ROBERT GLUSIC
2. Iowa's Waverly Light & Power is the first municipal utility to install its own wind turbines. PHOTO BY WAVERLY LIGHT & POWER
3. Investing in clean energy not only saves taxpayer dollars and protects the environment, it also creates good jobs for the future. PHOTO BY APOLLO ALIANCE
4. The Western Area Power Administration's 4-kilowatt photovoltaic array at its Rocky Mountain Customer Service Center building east of Loveland, Colorado. PHOTO BY WESTERN AREA POWER ADMINISTRATION

You can find this report and all the resource links referenced in the report at sierraclub.org/coolcities

The Sierra Club's members are 750,000 of your friends and neighbors. Inspired by nature, we work together to protect our communities and the planet. The Sierra Club is America's oldest, largest and most influential grassroots environmental organization.



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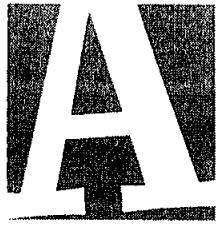
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Cool CITIES

Solving Global Warming
One City at a Time

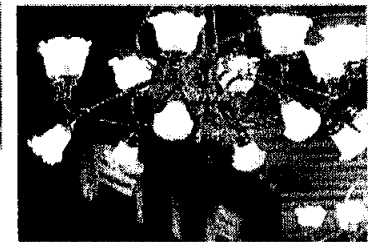
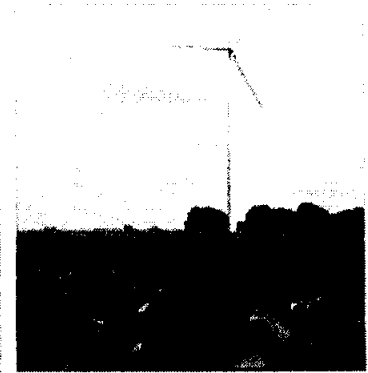
INTRODUCTION—

Re-Energizing Our Cities



Al over America, cities, counties and states are launching an exciting grassroots movement to help solve one of our country's most pressing problems: global warming. Frustrated by stalling on the federal level, local leaders are moving forward with innovative energy solutions that cut our dependence on oil, benefit public health and save taxpayer dollars. These mayors, county commissioners and governors are leading the way toward a safer and more secure future.

The purpose of this guide is to provide a resource for citizens and local officials who are ready to take real action to reduce energy waste and heat-trapping global warming pollution in their communities. In the following pages, you will find inspiring city success stories from a broad range of cities, from larger metropolitan centers such as Salt Lake City, St. Paul and Charlotte to smaller cities like Twin Falls, Idaho, and Waverly, Iowa.



The strategies that these and other cool cities are pursuing fall under three categories: **Cleaner Vehicles, Energy Efficiency and Renewable Energy.** Every one of these local solutions is already saving taxpayer dollars and improving public health by reducing energy waste and pollution. By taking innovative actions, forward-looking cities are re-energizing our nation, proving that we can solve global warming one city at a time.



Every one of these local solutions is already saving taxpayer dollars and improving public health by reducing energy waste and pollution.

GLOBAL WARMING—

The Time to Act Is Now

The scientific community has concluded that burning fossil fuels—oil, coal, and natural gas—to power our cars, homes and businesses is causing global temperatures to rise. This heating of the earth poses a serious threat to our health, safety and environment.

The national science academies of the United States, England, France, Russia, Germany, Japan, Italy, Canada, Brazil, China and India issued the following joint declaration in June 2005: “The scientific understanding of climate change is now sufficiently clear to justify nations taking prompt action.” The world’s leading scientists ask us to “recognize that delayed action will increase the risk of adverse environmental effects and will likely incur a greater cost.” [Source: “Joint Science Academies’

Statement: Global Response to Climate Change,” June 2005—royalsoc.ac.uk/document.asp?id=3222]

Cities Take the Lead

The good news is our cities have not become paralyzed by the threat of global climate change. Instead, they are taking the lead with the “U.S. Mayors Climate Protection Agreement” initiated by Seattle Mayor Greg Nickels. Introduced on February 16, 2005—the same day that the Kyoto Protocol international global warming treaty took effect in 141 nations worldwide—the agreement is gathering support around the country and has earned the backing of the U.S. Conference of Mayors. To date, more than 200 mayors representing nearly 41 million Americans in 38 states have signed on, pledging to reduce global warming carbon dioxide (CO₂) pollution citywide to 7 percent below 1990 levels by 2012.

How will these cities accomplish these ambitious goals in the next seven years? And how can your city become a Cool City?

Go to seattle.gov/mayor/climate for more information on the U.S. Mayors Climate Protection Agreement.

Seattle: Cool City Model

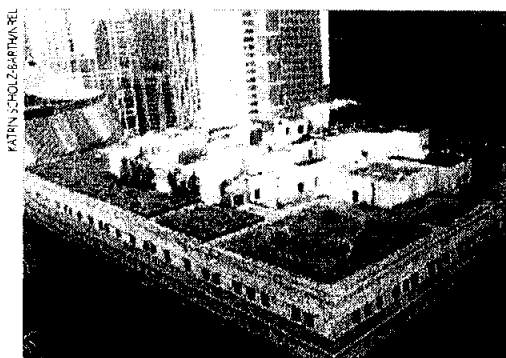
The city of Seattle is on the forefront of global warming local solutions. Under Mayor Greg Nickels’ leadership, the city government has already reduced its own global warming pollution by more than 60 percent by constructing green buildings and operating alternative fuel vehicles. Seattle City Light is the only electric utility in the country producing zero net greenhouse gas emissions, and the city is working to expand transportation choices, recycling, and urban forest restoration.

Mayor Nickels has also created a Green Ribbon Commission on Climate Protection, composed of business, environmental, government, community and labor leaders. The Commission is developing a plan for Seattle to meet its global warming pollution reduction targets, and identifying key economic opportunities for Seattle’s transition to a clean energy future.

“By making smart choices like building sustainable buildings, replacing old vehicles with a ‘Clean and Green’ fleet, and setting strict ‘no-net-emissions’ goals for Seattle City Light, the City has shown we can take local action on global problems,” said Mayor Nickels.

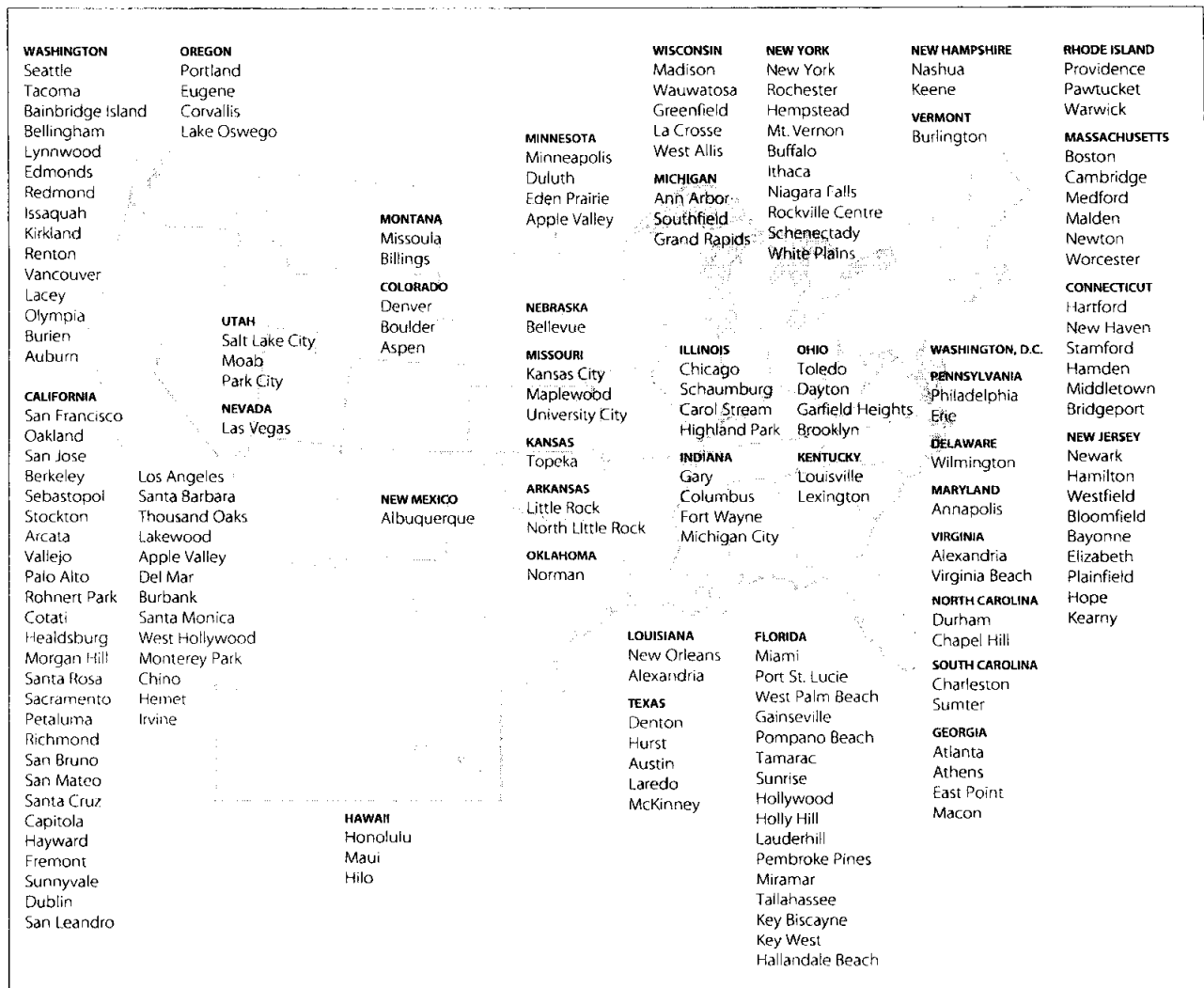
LEARN MORE

To find out about Seattle’s Climate Initiative, see ci.seattle.wa.us/environment/climateinitiative.html



Keeping Warm, Keeping Cool—In Klamath Falls, Oregon, a geothermal district heating system keeps the sidewalks clear and dry at the Basin Transit station. The 22,000 square-foot garden on the “green” roof of Chicago’s city hall helps to cool the building during the city’s hot summers.

Cool Cities Across America



As of February 2, 2006, 202 mayors representing more than 41 million Americans in 38 states have pledged to reduce global warming carbon pollution in their cities to 7 percent below 1990 levels by 2012.

"With the passage of significant international accords and adoption of this statement by U.S. mayors, we have hope that the global community can successfully join together, as nations did to solve the problem of ozone depletion, to prevent the most devastating consequences of global climate change."

—Salt Lake City Mayor Rocky Anderson

PUTTING GLOBAL WARMING SOLUTIONS INTO ACTION

Four Steps to Become a Cool City

Getting your city to become part of the fight against global warming is as simple as the four steps outlined below. These steps are modeled on the Cities for Climate Protection program, a successful initiative run by the International Council for Local Environmental Initiatives (ICLEI) to help cities reduce global warming pollution. Encouraging your city to join ICLEI's Cities for Climate Protection program is an excellent way to fulfill the Cool Cities pledge. But any city can start making a difference by putting existing smart energy solutions to work today.

Visit iclei.org for more information on the Cities for Climate Protection program.

Step 1: Take the "Cool Cities" Pledge

The first step towards curbing global warming pollution in your community is to ask your mayor to sign the U.S. Mayors Climate Protection Agreement. This agreement sets the goal of reducing citywide global warming carbon dioxide (CO₂) pollution to 7 percent below 1990 levels by 2012. See seattle.gov/mayor/climate

Step 2: Conduct a Global Warming Emissions Inventory

The next step is to conduct an inventory of your city's current global warming emissions. This information will identify the city's major CO₂ sources (and the greatest opportunities for reductions), and will provide a baseline to judge the city's progress towards its goal. Cities can receive technical assistance to conduct a global warming emissions inventory from a variety of sources including state and federal agencies as well as ICLEI through its Cities for Climate Protection program.

Step 3: Create a Solutions Plan

After completing its global warming inventory, your city will be ready to develop a solutions plan that can reduce emissions while lowering energy costs for the city. While every city's energy solutions plan will be unique, there are three important strategies: Green Vehicle Fleets, Energy Efficiency and Renewable Energy. In some combination, these solutions, which are illustrated with specific success stories later in this report, will form the foundation of your city's comprehensive energy-saving plan.

For examples of Cool City Energy Solutions Plans, visit sierraclub.org/coolcities



"Minneapolis has set high standards for CO₂ reduction and we're meeting them—a strategy that has earned our city tremendous environmental and economic benefits. Climate disruption is a global problem but we feel the effects locally. We are thrilled with Seattle and Mayor Greg Nickels' initiative and will work hard to challenge our nation through our example."

—Minneapolis Mayor R.T. Rybak, in front of his hybrid car

Step 4: Implement and Monitor Progress

Of course, a plan alone cannot cut global warming pollution. It is essential that your city put the plan into action and monitor its progress periodically. With a strong commitment, a sound plan and real action, your city will be on its way toward meeting the goals of the U.S. Mayors Climate Protection Agreement.

■ **With a strong commitment, a sound plan and real action, your city will be on its way toward meeting the goals of the U.S. Mayors Climate Protection Agreement.**

Green Vehicle Solutions

The technology exists today to significantly reduce global warming pollution from America's cars, trucks, and SUVs. Improving automobile fuel economy is the biggest single step to curbing global warming, since every gallon of gasoline burned creates 28 pounds of heat-trapping carbon dioxide pollution.

[Source: Oak Ridge National Laboratory: U.S. Department of Energy.]

Because transportation is a major source of global warming pollution, numerous cities are incorporating gas-electric hybrid vehicles and other fuel-efficient vehicles into their fleets. By using less gasoline, hybrid vehicles release a fraction of the global warming pollution emitted by conventional vehicles while saving money at the gas pump. Cities are also switching away from polluting diesel city and school buses to cleaner alternatives like compressed natural gas (CNG) powered vehicles.

Solution #1—Green Fleets

Governments of all sizes regularly purchase automobiles to help provide a wide range of taxpayer services. Recognizing an opportunity for action, many cities, counties and states are saving taxpayer dollars and reducing air pollution by "greening" their fleets with hybrid gas-electric and other vehicles that go farther on a gallon of gas.

Currently, 48 U.S. towns and cities in 36 states have green fleets programs, as do 26 county and 17 state governments. From police departments and school districts to administrative agencies and taxi services, green fleets are a winning city solution. [Source: greenfleets.org]

For general overview and step-by-step advice for writing a green fleets ordinance in your city, go to greenfleets.org/stepone.html

For a model green fleets ordinance, see the city of Denver's ordinance at www.greenfleets.org/denverrevised.html

Solution #2—Hybrid Vehicle Incentives

In addition to purchasing hybrid vehicles for city fleets, local governments can encourage local citizens and businesses to buy hybrid vehicles with a wide range of incentives. Some cities are already providing incentives such as free parking for hybrid vehicles and lower registration fees and taxes.

Solution #3—Clean Buses

City residents have long had to endure the sight and smell of black smoke belching from dirty diesel-engine buses. Now many cities are replacing these polluting old buses with buses that run on cleaner compressed natural gas (CNG) or with hybrid-electric diesel engines.

"Increasingly, cities are providing the answers

to some of America's toughest problems. So it's fitting that we're leading the way on global warming as well."

—Madison, Wisconsin, Mayor Dave Cieslewicz

NOTE: You can find all links referenced in this report at sierraclub.org/coolcities.

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Houston TEXAS

In April 2005, Bill White, the mayor of the nation's 4th largest city, announced plans to convert a substantial portion of the City of Houston's fleet of cars, pickup trucks and sport utility vehicles to hybrids by the year 2010. The city estimates that 80 percent of all new vehicle purchases and over 50 percent of the City's fleet could be hybrid vehicles by the year 2010.

Considering the size of the City's light duty fleet (more than 3,500), Houston's investment in hybrids will pay big dividends down the road. Over its projected five-year life-cycle, the Toyota Prius hybrid should provide net savings of almost \$1,900, in comparison to a conventional gasoline-only full-sized sedan, according to a City of Houston study.

Because hybrids are so fuel efficient, they release a fraction of the global warming pollution emitted by conventional vehicles. Over the lifetime of the vehicle, a hybrid Toyota Prius will release 43 fewer tons of global warming pollution compared to an average sedan.

"This makes economic sense, it makes environmental sense and it is going to set an example," said Mayor White. "We're going to save on fuel costs and we're going to help save our air quality."

LEARN MORE

Details on the City of Houston's greenfleets program are available at: houstontx.gov/mayor/press/20050408.html



Gentlemen, Start Your Hybrid Engines—Houston Mayor Bill White announces the greening of his city's fleet.

Charlotte NORTH CAROLINA

When Charlotte's fleet managers found that hybrid gas-electric vehicles are less expensive to operate than conventional cars, Mayor Pat McCrory and Council members Susan Burgess and John Tabor took action. Working with city staff and with the cooperation of Mecklenburg County, the city Council supported a plan to bring the total number of hybrids in the fleet to over two dozen by the end of 2006—more than tripling the city/county's current number of hybrids.



Although they typically cost more initially than standard gasoline-fueled cars, gas-sipping hybrids save on gasoline, have lower maintenance costs, and retain a higher resale value at the end of their useful life, according to Charlotte's Fleet Environmental Analyst David Friday.

Mr. Friday estimates that switching from a gas-only Ford Taurus to a hybrid Toyota Prius or Honda Civic would save city taxpayers approximately \$800-\$1200 annually per vehicle, including over \$400 in annual fuel costs.

"This results in a payback of the extra purchase cost within 2.5 to 5.5 years, depending on the model chosen and miles driven," said Friday. [Source: "Ford Taurus to Honda Civic Hybrid and Toyota Prius Comparative Analysis," David Friday, Charlotte Fleet Environmental Analyst, May 2005]

LEARN MORE

Charlotte's Fleet Environmental Analyst David Friday can be reached at dfriday@ci.charlotte.nc.us.

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Marion County

When gas-electric hybrid vehicles hit the market, Wyatt Earp, Director of Fleet Management for the Marion County Sheriff's Office in Florida, did some cost analysis to see whether it would be a good idea to pay a little more up front for a car that gets superior mileage. The answer?

"It costs a little more to start with, but operating expenses are less," says Earp. "Plus, we're working for the environment and showing people that we don't need to be so dependent on foreign oil."

The Toyota Prius vehicles are used by the department to deliver subpoenas, transfer prisoners, and run administrative errands. In addition, trained civilians use one of the hybrids to cruise the county checking out bridges, pipelines, and other potential terrorist targets as part of the department's "Homeland Security Patrol".

"We work to conserve as much energy as we can—that's our obligation to the American people," said Earp, a descendent of the legendary frontier lawman. "We spend taxpayers' money wisely, and that means we don't run experiments. We've got a good car here. Hopefully American car companies will offer something similar, soon."

Earp also manages the annual procurement of cars for the Florida Sheriff's Association, which negotiates wholesale rates for about 5,000 city and county agencies. Last year it bought 100 hybrids. "Now the word is getting around. I think we'll have 10 times more orders than we had last year," Earp says.

LEARN MORE

Visit the Marion County Public Affairs department's Web site at: marioncountyfl.org



You Have the Right to Get Good Mileage—For Wyatt Earp, director of fleet management for Marion County Sheriff's Department in Florida, purchasing fuel-efficient hybrid vehicles and reducing dependence on oil make sense for the environment—and the county budget.

Washington

The millions of visitors who visit our nation's capitol each year to see the monuments and museums can breathe easier because of the city's clean, natural gas buses which improve air quality and cut global warming pollution.

Over the past four years, the Washington Metropolitan Area Transit Authority has replaced 414 of its polluting diesel buses with cleaner burning, compressed natural gas buses. Every natural gas bus replaces the need for nearly 10,000 gallons of diesel fuel each year. Since natural gas buses release 25 percent less global warming emissions than diesel, these cleaner buses result in real cuts in global warming pollution.

Natural gas buses also help to reduce smog. Compared to traditional diesel buses, the city's natural gas buses release over 50 percent less smog-forming nitrogen oxides and 85 percent less soot pollution.

LEARN MORE

Visit the Washington's transit authority Web site at: wmata.com/about/met_news/pressroom/archived_releases/pr_cng.cfm



Energy Efficiency Solutions

Energy efficiency means using less energy through better technology to power buildings, light streets, and industry. Reducing energy use is one of the most cost-effective and fastest ways to save energy and reduce global warming pollution.

Every city can make substantial energy efficiency improvements by putting policies in place to promote efficient technologies and integrating them into planning decisions. The policies outlined below represent some of the most effective steps currently being taken on the city and local level.

Solution #1—Making New Buildings More Energy Efficient

Incorporating energy efficiency requirements into municipal building codes increases the overall energy efficiency of new buildings. Many cities have chosen to adopt the Leadership in Energy and Environmental Design (LEED) standards created by the United States Green Building Council (usgbc.org). LEED standards provide energy efficient design guidelines for a variety of building types and developments.

Solution #2—Energy Efficiency Retrofits to Existing Buildings

In addition to improving the energy efficiency of new buildings, cities can make substantial energy efficiency improvements to existing buildings. Modernizing lighting, heating, cooling, and other operations can reduce the energy requirements of existing buildings in a cost-effective manner, lowering energy

costs and reducing pollution.

The U.S. Green Building Council has also developed LEED standards for existing buildings (see usgbc.org). The standards provide guidance on improving the energy efficiency of building operations and other systems without making major changes to the interior and exterior of the building. Cities around the country have made major strides in improving the energy efficiency of police and fire stations, city office buildings, and schools.

Solution #3—Energy Efficient Street Lighting

Street lighting and traffic signals can use a significant amount of energy. By replacing traditional light fixtures with super-efficient light emitting diode or LED bulbs, cities are reaping energy and cost savings.

Solution #4—Public Benefit Funds

Cities with community-owned, local municipal utilities can integrate energy efficiency into the city's overall energy plan. If your city has a municipal utility, it can set up a local public benefits fund (PBF), where a small surcharge on consumer energy bills is used to create a fund to finance energy efficiency projects in the utility service area, thus lowering the overall energy costs for consumers.

Austin Energy (austinenergy.com) and the Sacramento Municipal Utility District (smud.org) are examples of municipal utilities that have used public benefit funds to lower energy use and costs through energy efficiency.

Solution #5—Combined Heat and Power

Cities and businesses can also benefit from energy efficient combined heat and power (CHP) systems. These systems produce both electricity and steam for heating and cooling from a single power plant located near consumers. As a result, CHP systems recover heat that is normally wasted at power plants and funnel the heat into surrounding buildings. This reduces energy costs and lowers pollution by eliminating the need for separate fuel sources for electricity and heating.

"The International Panel on Climate Change has warned that New Orleans is the North American city most vulnerable to the effects of climate change.

The rise of the Earth's temperature, causing sea level increases that could add up to one foot over the next 30 years, threatens the very existence of New Orleans. We will continue to collaborate and support efforts on global warming."

—New Orleans Mayor C. Ray Nagin

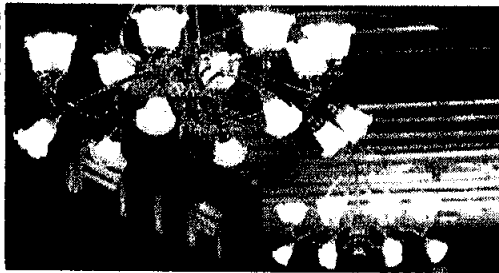
COOL CITIES

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Salt Lake City

Salt Lake City has dramatically reduced its energy costs by aggressively pursuing energy efficiency measures. Currently, the city saves over \$32,000 a year on its energy costs as a result of installing 861 light emitting diode (LED) traffic signals. The city plans to expand this program to all of its 1630 red and green lights, which is expected to save over 500 tons of

SALT LAKE CITY



heat-trapping carbon dioxide (CO₂) pollution each year with annual cost savings of \$53,000. The city has also found that LED signals require less maintenance than conventional lighting.

In addition, the city has replaced the conventional incandescent bulbs in its city and county office buildings with more energy efficient compact fluores-

cent bulbs (CFLs). These bulbs use much less energy and last significantly longer, saving the city over \$33,000 a year and reducing CO₂ emissions by 344 tons per year.

These energy efficiency measures are a part of a city wide action plan to protect the environment and reduce global warming emissions.

LEARN MORE

Read Salt Lake City's plan at slcgov.com/environment/actionplan.htm

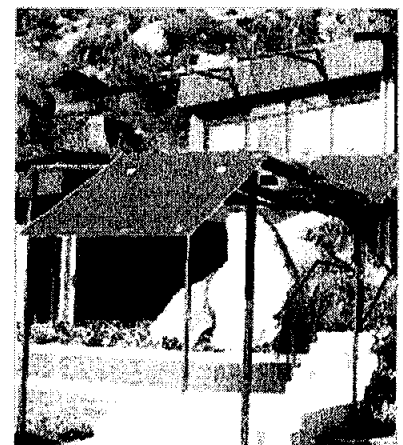
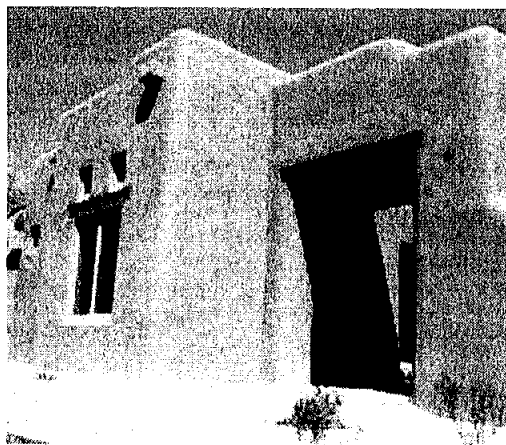
Scottsdale

The city of Scottsdale has been a leader in the Southwest on energy efficiency for buildings. In 1998, Scottsdale introduced Arizona's first green building program which helps builders and home owners learn about how to integrate energy efficiency and water saving features into new homes. Between 1998 and 2003, the green building program worked with 99 builders and issued 230 permits for green building projects in the city.

In March 2005, Scottsdale became the first city in the nation to require that all new city buildings and renovation projects meet LEED GOLD standards for energy efficiency and sustainability – one of the highest LEED ratings.

LEARN MORE

Read about Scottsdale's green building program at scottsdaleaz.gov/greenbuilding

**Harnessing the Desert Sun—**

New energy-efficient homes in Scottsdale use both renewable technologies like solar panels, as well as thick adobe walls that cool the house in the summer and keep it warmer in the winter.

COOL CITIESCool **CITIES** 10

Twin Falls

Like many other school districts around the country with growing numbers of students and decreasing budgets, the Twin Falls school district began searching for creative ways to reduce costs. School officials realized that the district could reduce energy costs and cut pollution by increasing the energy efficiency of its eleven schools. The upgrades included more efficient lighting and improvements to the heating, ventilation, and air-conditioning systems. The upgrades are expected to generate \$3.5 million in energy savings.

In an innovative financing agreement, the school district signed an energy savings performance contract with Minnesota-based Honeywell Corporation. Under a performance contract, a private company pays to make energy efficient improvements and is then reimbursed with the money saved through lower energy bills over the lifetime of the project.

According to Dr. John Miller, the Director of Operations for the Twin Falls School District, the performance contract gave the school district "the capital to accomplish in months, what would have normally taken us a decade to complete because of budget constraints."

LEARN MORE

The Twin Falls school district project Web site is available at newsite.schoolfacilities.com/cd_1695.aspx

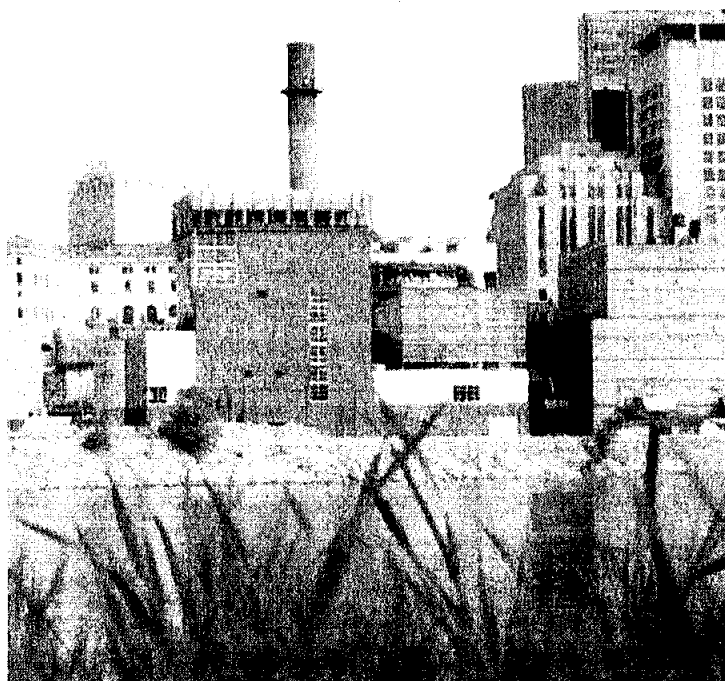
St. Paul

During the long, cold Minnesota winters, the majority of the buildings in downtown Saint Paul stay warm using District Energy's energy-efficient combined heat and power (CHP) system. Providing electricity to the grid and heating service to more than 80 percent of downtown Saint Paul and adjacent areas, including the Minnesota State Capitol and nearly 300 homes, the system uses heat drawn from a biomass-fired power plant located in the heart of the city.

By using a renewable resource as its primary fuel and by capturing ambient heat that would otherwise have been wasted, St. Paul's CHP system reduces overall energy consumption, costs, and pollution.

LEARN MORE

Details of Saint Paul's CHP system are available at districtenergy.com/currentactivities/chp.html

**Heat and Power—**

By producing both heat and electricity from one power plant, the District Energy plant helps save money and cut pollution.

Renewable Energy Solutions

By harnessing natural sources of energy like the sun and the wind, renewable energy sources can replace our reliance on outdated, polluting power plants that rely on fossil fuels. Today's solar panels efficiently transform sunlight into electricity while blending into the design of homes and office buildings. Modern wind turbines rise high above the ground, capturing the strongest winds to produce reliable electricity.

Currently, dirty fossil fuel power plants account for over a third of the nation's total global warming emissions. Meeting our energy needs with clean, renewable energy can move the country towards a brighter, cleaner, and cheaper energy future.

Cities around the country are discovering that investing in innovative renewable energy sources reduces global warming pollution and creates a reliable source of clean, homegrown electricity.

Solution #1—Renewable Energy Standards

A renewable energy standard requires that a certain percentage of all electricity sold in a city or a utility area come from clean, renewable energy sources such as wind and solar power by a specific target date. These standards are phased in over time so that renewable energy capacity can be built and incorporated into the necessary energy management and reliability plans. For instance, a 20 percent Renewable Energy Standard could be phased in over ten years, requiring an additional 2 percent of electricity generation to come from renewable sources each year. Cities that operate municipal utilities have been able to set renewable energy standards for their community-owned utilities.

Solution #2—Solar and Wind Installations

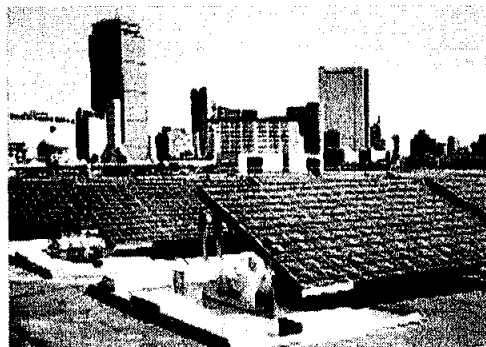
Some cities are moving forward by financing the construction of renewable energy projects themselves. In some cases, cities are working with local municipal utilities to construct wind turbines. In other cases, cities are working with privately owned utilities and renewable energy developers to construct solar arrays on city buildings, schools, and homes.

Solution #3—City Utility Contracts

Some cities are incorporating renewable energy requirements into their contract renewals with privately owned local utilities. For example, Denver, Colorado is working with its local utility, Xcel Energy, to establish modest renewable energy goals as part of the city's contract.



APOLLO ALLIANCE



ASTROSON TECHNOLOGY INC./APRI

Clean Energy, Good Jobs—Clean energy investments not only save taxpayer dollars and protect the environment, they also create good jobs for the future. One example is the rooftop solar panels powering Northeastern University's Eli Student Center in Boston.

"This is not only an environmental protection issue, but also an economic development and sustainability issue. Protecting our environment, we are protecting our resources and preserving them for future generations to come."

—Hallandale Beach, Florida, Mayor Joy Cooper

COOL CITIES

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Waverly

Wind energy is not only generating pollution-free energy to the town of Waverly, but it is also providing local economic development. As the first municipal utility in the United States to install its own wind turbines, Waverly Light & Power serves 4,300 customers in a 33 square-mile area. The utility has constructed wind turbines on land leased from local farmers, creating electricity for the city and additional income for the farmers.

Waverly Light & Power's Board of Trustees has set a goal of increasing wind production to 10 percent of the total local power supply, and is advancing quite well towards that target. Currently, the city's wind turbines generate 5.52 percent of the area's total electricity generation, and provide enough electricity to meet the needs of 761 homes each year. That translates into a reduction of carbon dioxide emissions by nearly 6,850 tons per year.

LEARN MORE

Read more on Waverly Light & Power's Web site at waverlyia.com



WAVERY LIGHT & POWER



WAVERY LIGHT & POWER

Fort Collins

Sitting along the eastern edge of the Rocky Mountain Front, the city of Fort Collins has embraced renewable energy and energy efficiency as key components to meet the city's energy needs. In 2003, the City Council adopted the Electric Energy Supply Policy which aims to "maintain high system reliability, maintain competitive electric rates and reduce the environmental impact of electricity generation."

This program sets strong clean energy targets, and is working to produce 15 percent of the city's electricity with renewable energy by 2017 and reduce per capita energy consumption 10 percent by 2012. Over the full time frame of the program, Fort Collins expects to reduce its global warming carbon dioxide emissions by 472,000 tons.

Clean energy is not only reducing global warming emissions in Fort Collins, but it is also saving money by reducing costs. According to the city's municipal utility, the cost of meeting energy needs through energy efficiency is about 1.7 cents per kWh, while the cost of providing energy is about 3.7 cents per kWh. That means that in Fort Collins energy efficiency is meeting citizens' needs at half the cost of energy coming from existing power plants.

According to Michael B. Smith, Fort Collins' Utilities General Manager, "We are pleased that some of our future energy growth will come from renewable energy sources. The Electric Energy Supply Policy is a positive blueprint for the future."

Funding for the city's efficiency and renewable energy programs comes from a 2 percent increase in customer rates. Even with these increases, Fort Collins continues to enjoy electricity rates below the state average, and will see lower energy costs as a result of the energy efficiency programs.

LEARN MORE

Read Fort Collins' Electric Energy Supply Policy at ci.fort-collins.co.us/utilities/energypolicy.php

COOL CITIESCool **CITIES** 13**Columbia**

Last year, with 78 percent of the vote, the citizens of Columbia, Missouri overwhelmingly approved a plan to require the city to increase its use of renewable energy sources, like wind and solar power, over the next 20 years. The measure will create a Renewable Energy Standard that requires that the city's municipal utility obtain 2 percent of its power from renewable energy by 2007, ramping up to 15 percent by 2022.

Columbia's successful ballot initiative is part of a growing national trend of voter-driven policies to increase the use of clean, renewable energy sources. Voters in Colorado recently approved a statewide Renewable Energy Standard that requires utilities in the state to produce 10 percent of their electricity with clean energy sources like wind and solar power by 2015.

LEARN MORE

Additional information about Columbia's renewal energy standard is available at dsireusa.org/documents/Incentives/MO04R.htm

**Blowin' in the Wind—**

The strong winds that blow across the California desert near Palm Springs generate electricity for dozens of Southern California cities.

CONCLUSION—

Re-Energizing Your City

As the success stories in this guide prove, cities are making real progress cutting global warming pollution. No longer waiting for the federal government to act, mayors and other local leaders are putting into place winning energy solutions right now. By using the innovative technologies of cleaner cars, energy efficiency and renewable energy, cities across America are protecting our health and environment, while saving taxpayer dollars.

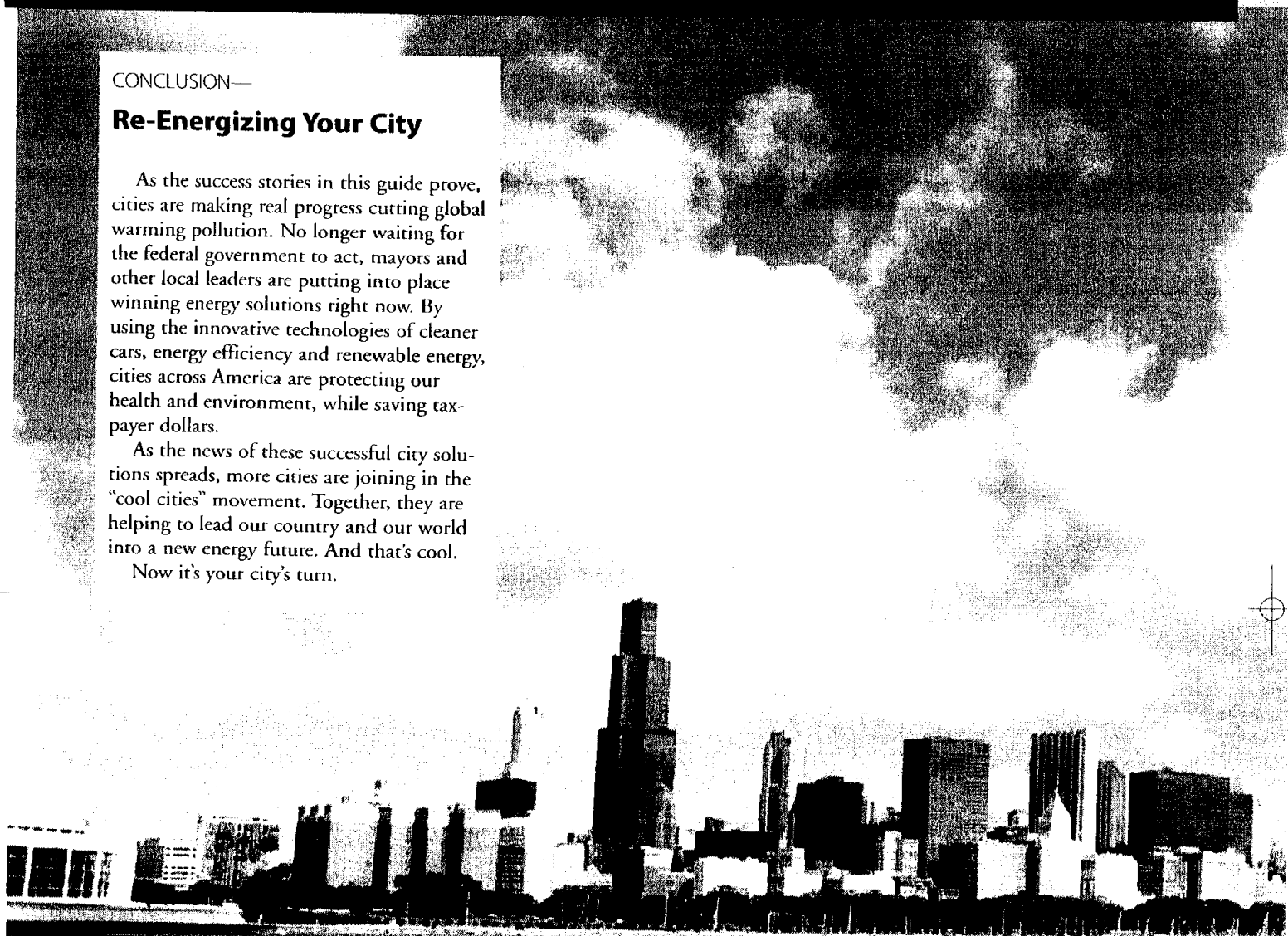
As the news of these successful city solutions spreads, more cities are joining in the “cool cities” movement. Together, they are helping to lead our country and our world into a new energy future. And that’s cool.

Now it’s your city’s turn.

LEARN MORE: sierraclub.org/coolcities

TAKE ACTION:

1. Join the U.S. Mayors Climate Protection Agreement to reduce global warming pollution
2. Green your city’s vehicle fleets with hybrid and other cleaner cars
3. Modernize city buildings with money-saving energy efficiency technology
4. Invest in clean and safe renewal energy





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CLUB

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Maryland Chapter

7338 Baltimore Avenue, Suite 101A
College Park, MD 20740-3211

May 6, 2006

Mayor Sidney Katz
31 South Summit Ave
Gaithersburg, MD 20877

Dear Mayor Katz,

Thank you very much for the invitation to attend the dedication of your new youth center. You should feel justifiably proud of your achievement in producing one of the few green buildings in the county. I hope you invite lots of public officials for a tour. It would be great to schedule one after the electricity rates soar this summer!

Since we lack national leadership on addressing the issue of global warming, it is heartening to see local municipalities like yours take the initiative to reduce their emissions. The Sierra Club would like to celebrate and publicize the good deeds of communities like yours which is why we're hoping that all of Maryland's mayors sign on to the US Mayor's Climate Protection Agreement. The agreement is an expression of intent to seriously work toward reducing your city's emissions. So far in Maryland the mayors of these jurisdictions have signed: Annapolis, Baltimore, Town of Chevy Chase. Gaithersburg would be a wonderful addition to this group.

Erica told me that she is looking seriously at the agreement and that's great. You've already proved with your green building initiative that you can take on the challenge. Many of the steps you will take toward compliance will save your city significant amounts of money in the long run. You can learn more about the agreement and how to sign up by going to the Seattle Mayor's website <http://www.seattle.gov/mayor/issues/caa/>. Click on the map at the top of the page to see details.

Congratulations again on completing your youth center. I'm going to talk up your accomplishment with every public official I talk to.

Yours,

Betsy Johnson
Chapter Chair

cc. Erica Shingara

Erica Shingara - U.S. Mayors' Climate Protection Agreement

From: <KERainbolt@aol.com>
To: <skatz@gaithersburgmd.gov>
Date: 03/30/2006 8:01 AM
Subject: U.S. Mayors' Climate Protection Agreement

Sidney,

I saw in this week's issue of TIME Magazine, an article about mayors around the country who are working together in a concerted effort to meet or beat the Kyoto Protocol (an agreement between 141 countries, excluding the U.S.) by reducing greenhouse-gas emissions.

Started by Seattle Mayor Greg Nickels 13 months ago, the U.S. Mayors' Climate Protection Agreement has been embraced by more than 200 mayors', including three in Maryland:

Ellen Moyer	Annapolis	MD
Martin O'Malley	Baltimore	MD
William H. Hudnut	Chevy Chase	MD

While Gaithersburg continues to expand, adding thousands of new homes and cars--which adversely affect the pollution levels locally--Gaithersburg should also put into place a plan to reduce greenhouse gas emissions.

Gaithersburg wants to be known as a "green city". Now is it time to prove it. Please join Mayors Nickels, Hudnut, O'Malley, and Moyer (and more than 200 others in your position) by becoming a member of the U.S. Mayors' Climate Protection Agreement.

For more information, go to <http://www.ci.seattle.wa.us/mayor/climate/>

I look forward to your response.

Sincerely,

Karen Rainbolt
934 Pointer Ridge Dr
Gaithersburg, MD

Erica Shingara - Fwd: US Mayor's climate protection agreement

From: Fred Felton
To: Erica Shingara
Date: 03/15/2006 10:52:54 AM
Subject: Fwd: US Mayor's climate protection agreement

>>> "Betsy Johnson" <betsy_johnson@comcast.net> 03/14/06 5:44 PM >>>
Dear Mr. Katz,

Al Carr, Councilmember of Kensington, suggested I contact you since you are the President of the Montgomery County Chapter of the Maryland Municipal League.

The Sierra Club is conducting a national campaign called the "Cool Cities Campaign" which involves working with municipalities to get them to sign on to the US Mayor's Climate Protection Agreement - see <http://www.seattle.gov/mayor/climate/> and then working with them to help them find ways to implement the agreement at the local level. So far the following jurisdictions in Maryland have signed on to the agreement: Annapolis, Baltimore and the Town of Chevy Chase. We are hoping that lots more municipalities sign on.

Since our federal government doesn't seem to be taking positive action to reduce global warming emissions in our country, this is a way to create a positive change from the local level. So far 212 Mayors have signed the agreement. I hope you will support this initiative in Gaithersburg and will encourage others in the Montgomery Chapter to take it on as well.

You can learn more about the Cool Cities Campaign at <http://www.sierraclub.org/globalwarming/coolcities/foursteps.asp>

I understand that you will be opening a green building in May. I'd be very interested in attending that opening if I could get on the list of invitees. I'm also copying Walt Sonnevile on this email - he's a Sierra Club member and a Gaithersburg resident who is interested in helping Gaithersburg reach "Cool City" status.

I hope we can take some giant steps together on this issue. I look forward to hearing from you.

Sincerely,

Betsy Johnson
Chair, Maryland Sierra Club
301-656-4948
betsy_johnson@comcast.net

Erica Shingara - To Mayor Katz: US Mayors Climate Protection Agreement

From: Shawn Humphrey <irishboy@celticisle.com>
To: <skatz@gaithersburgmd.gov>
Date: 05/25/2005 8:43:15 AM
Subject: To Mayor Katz: US Mayors Climate Protection Agreement

Dear Mayor Katz,

I am a new Gaithersburg citizen and I'm pleased to live here. I would like to encourage you to review the following link and consider making a commitment to this agreement.

<http://www.ci.seattle.wa.us/mayor/climate/>

As a Maryland citizen, I take my environmental responsibilities seriously. I take the bus and the metro to work. I recycle. I find energy-efficient ways of maintaining my household. I try to be part of the solution, not the problem.

Yet, I am concerned that my family's actions alone are not enough. Like many U.S. cities, Gaithersburg's population is growing rapidly. Unchecked sprawl, pollution, and inefficient energy use threaten future generation's quality of life. Of particular concern for many of us is the increasing output of greenhouse gas emissions and the resulting global warming weather changes.

As I'm sure you already know, the U.S. did not commit to decreasing our greenhouse gas emissions. Maryland is an "observer" in the Regional Greenhouse Gas Initiative (RGGI), but observation does not constitute action. It's up to private individuals, corporations, and local governments to take the lead. Please let me know what Gaithersburg intends to do to counteract the threat of global warming.

The other concerned individuals (friends and family who are equally concerned by global warming) who have been included in this e-mail have been encouraged to contact their mayors as well. Some of them are Gaithersburg residents. They also look forward to your response.

Thank you for your time,
Shawn Humphrey
335 West Side Drive Apt 204
Gaithersburg, MD
20878
301-977-0176
irishboy@celticisle.com

CC: Anthony Barnhart <symetry2@hotmail.com>, Jenny Barnhart <slayer_68@hotmail.com>, Edward Elsner <edward_elsner@lycos.com>, Josh Hathaway <joshhath@hotmail.com>, Megan Humphrey <megan_the@hotmail.com>, Melissa Kim <ravengrrl420@hotmail.com>, Jon McCarron <jmccarron@tucows.com>, Scott and Courtney Morgan <deathstar71@comcast.net>, Anthony Owens <brutesquad@princessbride.org>, Anthony Ranville <ranvillet@hotmail.com>, Julie Tarrant <JTarrant74@aol.com>, Jason Whitney <jason@celticisle.com>, Heather Whitney <lyricguitar25@yahoo.com>